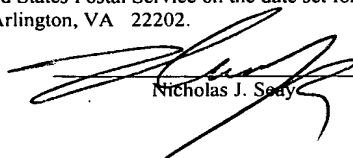


I hereby certify that this correspondence is being deposited with the United States Postal Service on the date set forth below as First Class Mail in an envelope addressed to: Commissioner for Patents, P O Box 2327, Arlington, VA 22202.

Date of Signature and Deposit: December 2, 2002


Nicholas J. Sady

PATENT

GR 1632
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: James A. Thomson

Date: December 2, 2002

Serial No.: 09/522,030

Group Art Unit: 1632

Filed: 03/09/2000

Examiner: Joseph T. Woitach

For: SERUM FREE CULTIVATION OF PRIMATE
EMBRYONIC STEM CELLS

File No.: 960296.96544

RESPONSE

Commissioner For Patents
P O Box 2327
Arlington, VA 22202

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TECH CENTER 1600/2900

Dear Sir:

In response to an Office Action dated July 1, 2002 in the file of the above-identified application, please amend the application as follows:

In the Specification

Page 6, delete the paragraph beginning on line 3 and substitute the following:

B
--Techniques for the initial derivation, culture, and characterization of the human ES cell line H9 were described in J. Thomson et al., 282 Science 1145-1147 (1998). In my experiments herein human ES cells were then plated on irradiated (35 gray gamma irradiation) mouse embryonic fibroblast. Culture medium for the present work consisted of 80% "KnockOut" Dulbecco's modified Eagle's medium (DMEM) (Gibco BRL, Rockville, MD), 1 mM L-Glutamine, 0.1 mM β -mercaptoethanol, and 1% nonessential amino acids stock (Gibco BRL, Rockville, MD), supplemented with either 20% fetal bovine serum (HyClone, Logan, UT) or 20% KnockOut SR medium adjuvant, a serum-free replacement originally optimized for mouse ES cells (Gibco BRL, Rockville, MD). The components of KnockOut SR medium adjuvant are those described for serum replacements in W0 98/30679.--